DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020236

Address: 333 Burma Road **Date Inspected:** 27-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr.Zhu Zhong Hai. No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A

Delayed / Cancelled:

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

NDT

OBG TRIAL ASSEMBLY

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as OBG Segment 11DE –EE Base metal Repair. The weld designations reviewed are as follows.

Punch list Item 335 Base metal repair area.

NDT Notification No-07950

This QA Inspector observed the following work in progress:

OBG TRIAL ASSEMBLY

OBG Segment 12AW~12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 046709, 044551, Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AW to 12 BW Deck plate to Deck plate joint. Joint identified

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as OBW12-001. ZPMC QC Identified as Zhou Peng. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2211-B-U2-FCM-1. For more information see below attached picture number 1.

OBG Segment 12AW~12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 040611, Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AW to 12 BW Side plate to Side plate Hold back area cross beam side. Joint identified as OBW12D-001. ZPMC QC Identified as Zhou Peng. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

OBG Segment 12AW~12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 040611, Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AW to 12 BW Bottom plate to Bottom plate Hold back area cross beam side. Joint identified as OBW12B-001. ZPMC QC Identified as Zhou Peng. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

OBG Segment 12AE~12BE Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AE~12BE Side plate to Side plate Cross beam side. Joint identified as OBE12D-002. ZPMC CWI Identified as An Qing Xiang with temporary welding repair report WRR-B-WR17903. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1.

OBG Segment 12AW

This QA Inspector observed ZPMC qualified welding personnel identified as 046704 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AW, Longitudinal Diaphragm to Bottom plate Counter weight side. Joint identified as SEG3004X-051. ZPMC QC Identified as Shi Lei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2212-Tc-U4b –FCM-1.

Ultrasonic Testing:

This QA Inspector observed AB/F Ultrasonic Testing Inspector, performed UT "D" scan on OBG Segment 12AE~12BE Deck plate to Deck plate joint. Joint identified as OBE12-003. For more information see below attached picture number 2.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone :150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer